

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

Claims 1 - 66 (canceled).

Claim 67. (Previously Presented): A method of transmitting ions along an axis located between a length defined by a first mass spectroscopy device and a second mass spectroscopy device, said method comprising the steps of:

- (a) receiving the ions from the first mass spectroscopy device;
- (b) guiding the ions along the axis;
- (c) accelerating the ions along the entire length;
- (d) damping the ions along the entire length; and
- (e) delivering a substantially continuous beam of ions to the second mass spectroscopy device.

Claim 68. (Previously Presented): A method of transmitting ions as defined in Claim 67, wherein step (d) is performed by maintaining the ions under high pressure.

Claim 69. (Previously Presented): A method of transmitting ions as defined in Claim 68, wherein said high pressure is maintained at a range from 0.1 mTorr to 10 Torr.

Claim 70. (Previously Presented): A method of transmitting ions as defined in Claim 68, wherein said high pressure is maintained at a range from about 10 mTorr to about 1000 mTorr.

Claim 71. (Previously Presented): A method of transmitting ions as defined in

Claim 68, wherein said high pressure is maintained at a range from about 50 m Torr to about 100 m Torr.

Claim 72. (Previously Presented): A method of transmitting ions as defined in Claim 68, wherein said high pressure is maintained by pumping.

Claim 73. (Previously Presented): A method of transmitting ions as defined in Claim 67, wherein step (b) is performed by providing a plurality of ion guide rods about the axis.

Claim 74 (Previously Presented): A method of transmitting ions as defined in Claim 73, wherein said plurality of ion guide rods are symmetrically arranged about the axis along the length.

Claim 75. (Previously Presented): A method of transmitting ions as defined in Claim 74, wherein said plurality of ion guide rods includes at least about four (4) ion guide rods.

Claim 76. (Previously Presented): A method of transmitting ions as defined in Claim 67, wherein step (c) is performed by providing a plurality of accelerator rods about the axis.

Claim 77. (Previously Presented): A method of transmitting ions as defined in Claim 76, wherein said plurality of accelerator rods are symmetrically arranged about the axis along the length.

Claim 78. (Previously Presented): A method of transmitting ions as defined in Claim 77, wherein said plurality of accelerator rods are arranged closer to the axis at the first mass spectroscopy device than the second mass spectroscopy device.

Claim 79. (Previously Presented): A method of transmitting ions as defined in Claim 78, wherein said plurality of accelerator rods includes at least about four (4) accelerator rods.

Claim 80. (Previously Presented): A method of transmitting ions along an axis located between a length defined by a first mass spectroscopy device and a second mass spectroscopy device, said method comprising the steps of:

- (a) receiving the ions from the first mass spectroscopy device at an entrance;
- (b) guiding the ions along the axis with at least one ion guide rod;
- (c) accelerating the ions along the entire length with at least one accelerator rod;
- (d) damping the ions along the entire length; and
- (e) delivering a substantially continuous beam of ions through an exit to the second mass spectroscopy device.

Claim 81. (Previously Presented): A method of transmitting ions as defined in Claim 80, wherein step (d) is performed by maintaining the ions under high pressure.

Claim 82. (Previously Presented): A method of transmitting ions as defined in Claim 81, wherein said high pressure is maintained at a range from 0.1 mTorr to 10 Torr.

Claim 83. (Previously Presented): A method of transmitting ions as defined in Claim 81, wherein said high pressure is maintained at a range from about 10 mTorr to about 1000 mTorr.

Claim 84. (Previously Presented): A method of transmitting ions as defined in Claim 81, wherein said high pressure is maintained at a range from about 50 m Torr to about 100 m Torr.

Claim 85. (Previously Presented): A method of transmitting ions as defined in

Claim 81, wherein said high pressure is maintained by pumping.

Claim 86. (Previously Presented): A method of transmitting ions as defined in Claim 80, wherein said at least one ion guide rod is a plurality of ion guide rods located about the axis.

Claim 87 (Previously Presented): A method of transmitting ions as defined in Claim 86, wherein said plurality of ion guide rods are symmetrically arranged about the axis between said entrance and said exit.

Claim 88. (Previously Presented): A method of transmitting ions as defined in Claim 87, wherein said plurality of ion guide rods includes at least about four (4) ion guide rods.

Claim 89. (Previously Presented): A method of transmitting ions as defined in Claim 80, wherein said at least one accelerator rod step is a plurality of accelerator rods located about the axis.

Claim 90. (Previously Presented): A method of transmitting ions as defined in Claim 89, wherein said plurality of accelerator rods are symmetrically arranged about the axis between said entrance and said exit.

Claim 91. (Previously Presented): A method of transmitting ions as defined in Claim 84, wherein said plurality of accelerator rods are arranged closer to the axis at the entrance than the exit.

Claim 92. (Previously Presented): A method of transmitting ions as defined in Claim 91, wherein said plurality of accelerator rods includes at least about four (4) accelerator rods.